

We claim:

1. A method of sending information through a topology,
comprising:

- 5 providing a first node having a first access port, a second access
port and a first uplink connected to a router;
providing a second node having a first access port and a first
uplink, the first uplink of the second node being connected to the
first access port of the first node;
- 10 providing a third node having a first access port and a first
uplink, the first uplink of the third node being connected to the
second access port of the first node;
sending a first packet via the first access port to the second
node;
- 15 the second node adding a tag with a first port number to the first
packet;
the second node sending the first packet via the first uplink of
the second node to the first access port of the first node;
the first node receiving the first packet via the first access
20 port of the first node;
the first node adding a first port number of the first access port
of the first node to the tag; and
the first node sending the first packet via the first uplink of
the first node to a first router.

- 25
2. The method according to claim 1 wherein the method further
comprises providing the first node with a second uplink connected
to a first sister node, the first sister node being identical to
the first node.

3. The method according to claim 1 wherein the method further comprises, the first node sending the first packet via the second uplink to the first sister node.

5 4. The method according to claim 3 wherein the method further comprises the first sister node sending the first packet via a first uplink of the first sister node to a second router.

10 5. The method according to claim 1 wherein the method further comprises providing the tag of the first packet with a first nibble containing a port number of a previous node and a second nibble, the first node adding the first port number of the first node to the second nibble.

15 6. The method according to claim 5 wherein the method further comprises shifting the first port number in the first nibble to the second nibble.

20 7. The method according to claim 1 wherein the method further comprises providing a tag of a second packet with a first nibble containing a second port number and a second nibble.

25 8. The method according to claim 7 wherein the method further comprises the second node removing the second port number from the first nibble of the second packet.

30 9. The method according to claim 8 wherein the method further comprises the second node removing the tag from the second packet when the tag contains no non-zero values in first and the second nibbles.

10. The method according to claim 1 wherein the method further comprises forming a tree topology of nodes connected to one another.

5 11. The method according to claim 1 wherein the method further comprises forming a ring topology of nodes connected to one another.